

IN THE CLAIMS

1.- 20. (cancelled)

21. (new) An intervertebral spacer comprising:

a spacer body, having a first exterior surface and a second exterior surface, at least one of said first exterior surface and said second exterior surface adapted for engaging a vertebral body, at least one of said first exterior surface and said second exterior surface having a groove disposed therein; and

a vertebral body contact element having a perimeter and a central portion, wherein at least a portion of said perimeter of said vertebral body contact element is disposed within said groove to thereby aid in securely attaching said vertebral body contact element to said first exterior surface or said second exterior surface; and

a coating being disposed within said groove and about said at least a portion of said perimeter of said vertebral body contact element, said coating attaching said vertebral body contact element to said first or second exterior surface.

22. (new) The artificial intervertebral disc of claim 21, wherein the vertebral body contact element includes a wire mesh having a resting shape of a dome convexly extending from the spacer body such that a gap is formed between said central portion of said vertebral body contact element and said first or second exterior surfaces.

23. (new) The artificial intervertebral disc of claim 22, wherein the vertebral body contact element has a convexity depth approximating a concavity depth of a concave surface of a vertebral body.

24. (new) The artificial intervertebral disc of claim 22, wherein the vertebral body contact element has a footprint approximating a footprint of a concave surface of a vertebral body.
25. (new) The artificial intervertebral disc of claim 2, wherein the coating is a plasma spray.
26. (new) The artificial intervertebral disc of claim 22, further comprising an osteoconductive feature adjacent said wire mesh.
27. (new) The artificial intervertebral disc of claim 26, wherein said coating includes said osteoconductive feature.
28. (new) The artificial intervertebral disc of claim 21, wherein the vertebral body contact element has a resting shape of a dome convexly extending from the spacer body.
29. (new) The artificial intervertebral disc of claim 21, further comprising an osteoconductive feature adjacent the vertebral body contact element.
30. (new) The artificial intervertebral disc of claim 29, wherein said coating includes said osteoconductive feature.
31. (new) An intervertebral spacer comprising a spacer body including at least one vertebral body contact element attached to said spacer body, said vertebral body contact element adapted for securely mating with an adjacent vertebral body endplate, said vertebral body contact element being deformably reshapeable under anatomical loads while attached to said spacer body such that the vertebral body contact element deflects against the

vertebral body endplate to securably engage the vertebral body endplate, said vertebral body contact element having a perimeter region and a central portion, a coating dispersed over said perimeter region to securely attach said perimeter region to said spacer body.

32. (new) The artificial intervertebral disc of claim 31, wherein the vertebral body contact element includes a wire mesh.

33. (new) The artificial intervertebral disc of claim 32, wherein the wire mesh has a convexity depth between said spacer body and said central portion of said vertebral body contact element approximating a concavity depth of the concave surface of a vertebral body.

34. (new) The artificial intervertebral disc of claim 32, wherein said wire mesh has a deformable footprint approximating a footprint of a concave surface of a vertebral body.

35. (new) The artificial intervertebral disc of claim 32, wherein said coating is a plasma spray.

36. (new) The artificial intervertebral disc of claim 12, further comprising an osteoconductive feature adjacent said wire mesh.

37. (new) The artificial intervertebral disc of claim 36, wherein said coating includes said osteoconductive feature.

38. (new) The artificial intervertebral disc of claim 31, wherein said vertebral body contact element has a resting shape of a dome convexly extending from said spacer body.

39. (new) The artificial intervertebral disc of claim 31, further comprising an osteoconductive feature adjacent said vertebral body contact element.

40. (new) The artificial intervertebral disc of claim 39, wherein said coating includes said osteoconductive feature.